

Remarks

Claims 1-16 are pending herein. By this Amendment, independent claims 1, 7, 9 and 11 have been amended.

Specifically, claims 1 and 7 have been amended to recite that the tape winding unit is configured to wind the bundling tape round the bank note stack by moving the tape gripper around the bank note stack with the leading end part of the bundling tape gripped by the tape gripper. Claims 9 and 11 have been amended to recite that the tape winding unit is configured to rotate the tape gripper around the bank note stack with the leading end part of the bundling tape gripped by the tape gripper. Support for these amendments can be found in the specification at, for example, page 14, line 36 – page 15, line 2; page 28, lines 9-11; page 32, lines 13-21; page 35, lines 2-4; page 48, line 35 – page 49, line 1; page 51, lines 17-25; page 53, lines 15-20; page 55, lines 8-10; page 56, lines 7-11; and page 58, lines 7-12; and Figs. 3, 18, 20(B), 21(A) and 22(B).

In the Office Action, claims 1-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,938,009 to Takami in view of U.S. Patent Application Publication No. 2002/0007616 to Lamamy et al. (“Lamamy”). The Office Action does not set forth any rejections relative to claims 13-16. Applicant assumes the Examiner meant to include these claims in the rejection of claims 1-12.

In view of the amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection set forth in the Office Action.

As noted above, the independent claims have been amended to recite that the tape winding unit is configured to wind the bundling tape round the bank note stack by moving or rotating the tape gripper *around the bank note stack with the leading end part of the bundling tape gripped by the tape gripper*.

Takami is directed to an automatic package strapping machine. According to the Office Action, element 11 in the Takami machine reads on the movable tape gripper set forth in the instant claims. Element 11 in Takami is a guiding groove located in a first clamp 2 (see col. 1,

lines 33-34). First clamp 2 clamps the leading end of the strap B during operation of the automatic package strapping machine. Neither element 11 nor clamp 2 is ever moved or rotated around the package in Takami. Takami does not teach or suggest a winding unit configured to move a gripper around the package therein. Therefore, for at least this reason, Takami does not teach or suggest Applicants' claimed invention.

Lamamy is cited for disclosing an apparatus for banding a product wherein an endless conveyor (28) is used to move gripping means (27). According to the Office Action, it would have been obvious to modify the Takami machine to include an endless belt to move the gripper in order to provide for continuous and synchronized operation of the machine.

Applicants submit that modifying the Takami packaging machine to use the endless belt taught in Lamamy would not result in Applicants' claimed machines because Takami does not teach or suggest a winding unit configured to move a gripper around the package therein.

Thus, for at least this reason, Applicants respectfully submit that claims 1-16 would not have been obvious over Takami in view of Lamamy.

Applicants further submit that the instant claims 1-16 would not have been obvious over Takami in view of Lamamy or in view of the official notice taken by the Examiner because neither Takami, Lamamy nor the official notice teaches or suggests the printing mechanism and controller, particularly the combination thereof, used in the claimed invention.

According to the Office Action, it would have been obvious to add a printing unit to the Takami packaging machine in order to provide the end-user with a visual indication of the exact contents of the package. Applicants submit that the printing mechanism used in the claimed invention is not a mere well-known printing mechanism. Applicants' claimed bundling machines involve more than using a printing unit to provide end-users with a visual indication of the exact contents of the package. In Applicants' claimed bundling machines, the printing mechanism is placed in the tape feed passage and prints the bundling tape with a plurality of colors, *each of said colors indicating a denomination of a corresponding one of the bank note stacks to be bundled*. The printing mechanism is controlled by a controller which also controls the tape carrying mechanism, the printing mechanism, the tape winding unit, and the cutting-and-

bonding unit. The controller set forth in the claims executes the following operations relative to the printing mechanism:

- (a) a first operation for setting the leading end of the bundling tape at a print starting position upstream of a terminal end of the tape feed passage in preparation for bundling the bank note stack loaded into the bundling space and advancing the leading end of the bundling tape upon a start of a bundling process from the print starting position to the tape gripping position in the bundling unit;
- (b) a second operation for printing the bundling tape with the color indicating the denomination by the printing mechanism when the leading end of the bundling tape is advanced and/or when the tape feed unit is in the forward feed operation so that an outermost layer of the bundling tape bundling the bank note stack is substantially wholly printable with the color; and
- (c) a third operation for moving the leading end of the following bundling tape to the print starting position by the reverse feed operation of the tape carrying mechanism to prepare for the next bundling process, after rotating the tape gripper from the tape gripping position to the bank note setting position, loading the bank note stack into the bundling space, bundling the bank note stack with the bundling tape by the tape winding unit, tightening the bundling tape bundling the bank note stack and cutting off the tightened bundling tape.

One of the advantages provided by the controller in the present invention is discussed in the specification at page 12, lines 10-17:

A denomination mark can be printed on only a length of a bundling tape sufficient for bundling a bank note stack when the bundling tape is used for bundling the bank note stack. Therefore, a denomination mark indicating the denomination of the bank notes bundled in the preceding bundling process will not be printed on the bundling tape to be used for bundling bank notes in the succeeding bundling process. **Consequently, the denomination of the bank notes of a bundled bank note stack can be clearly indicated.** [emphasis added] (page 12, lines 10-17)

At page 2, line 1 – page 3, line 16, the instant specification discusses issues that arose in the development of Applicants' bank note bundling machine. For example:

As obvious from the foregoing description, the length of the bundling tape fed to the bundling unit is very long as compared with the length of the bundling tape needed to bundle the bank note stack. (page 2, lines 27-29)

Therefore, the trial bank note bundling machine prints a part of the bundling tape to be used for bundling bank notes of a denomination different from that of bank notes being presently bundled with a color indicating the denomination of the bank notes being bundled. Therefore, the unused leading part of the bundling tape printed with the color indicating the denomination of the bank notes bundled by the preceding bundling process must be cut off manually with a pair of scissors or the like and an unprinted leading part of the bundling tape needs to be set at the predetermined position on the tape feed passage. (page 2, line 30 – page 3, line 3)

Thus the trial bank note bundling machine requires additional work for cutting off the printed leading part of the bundling tape printed with the color indicating the denomination of the bank notes bundled in the preceding bundling process and for placing the unprinted leading part of the bundling tape at the predetermined position on the tape feed passage. (page 3, lines 4-9)

Even if bank notes of the same denomination are bundled successively, a leading part of the bundling tape printed with a color indicating the denomination of bank notes bundled in the preceding bundling process is printed again with the same color. Consequently, the bundling tape is liable to be printed unsatisfactorily with the color and such unsatisfactory printing spoils the aesthetic appearance of the bundle of bank notes. (page 3, lines 10-16)

At page 3, lines 19-26, Applicants set forth features obtained with the present invention:

The present invention has been made to print a denomination mark indicating the denomination of bank notes to be bundled precisely only on a part of a bundling tape of a length needed to bundle the bank notes, to eliminate a tape changing operation when the denomination of bank notes to be bundled is changed, to achieve a bank note bundling operation efficiently and to prevent perfectly failure in correctly indicating the denomination of bank notes to be bundled.

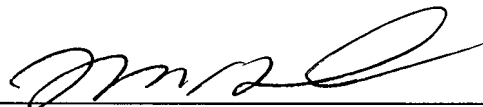
Thus, the particular combination of elements present in Applicants' claimed machines overcomes problems present in a different combination. Applicants submit that neither Takami, Lamamy nor the official notice teaches or suggests the combination of elements present in Applicants' claimed bundling machines or the advantages obtained by such combination.

Therefore, for at least this additional reason, Applicants submit that claims 1-16 would not have been obvious over Takami in view of Lamamy or in view of the judicial notice taken by the Examiner.

In view of the amendments and remarks herein, Applicants respectfully request that the rejection set forth in the Office Action be withdrawn and that claims 1-16 be allowed.

If any additional fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033458M003.

Respectfully submitted,
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Enclosures: (1) Petition for Extension of Time
(2) Check for the Sum of \$1050